

Virginia Unmanned Systems Commission

Second Meeting

November 5, 2015

The George Washington University

Chairs Present:

Dr. John S. Langford, Chairman and CEO of Aurora Flight Systems

Ms. Nicole Barranco, State Government Relations, Volkswagen Group of America

Members Present:

Mark Warner, U.S. Senator

Karen Jackson, Secretary of Technology

Jim Hughes, Vice President of Submarine Programs, Newport News Shipbuilding

Guy Sanitate, Scitor Corporation, an SAIC Company

Steve Weidner, National Air Traffic Controllers Association

Victoria Cox, Senior Technical Advisor, Veracity Engineering

Tom Dingus, Director, Virginia Tech Transportation Institute

Scott Strimple, Captain, United Airlines

Young Kim, CEO, Digital Harvest

David Hamrick, Senior Technical Advisor, The MITRE Corporation

Vice Admiral David Architzel USN (Ret), President, Fairlead Boat Works, Inc. (Special Advisor)

Jack Kennedy, Jr., Esq., Clerk of Circuit Court, County of Wise

Representing Commission Members:

Mark Oliva, Defense Legislative Fellow for U.S. Representative Scott Rigell

Grindly Johnson, Deputy Secretary of Transportation for Secretary Aubrey Layne

Amy Harris, Director of STEM, Office of the Secretary of Education, for Secretary Anne Holton

Guests in Attendance:

David Hinton, Executive Director to the Commission, Office of the Secretary of Technology

Greg Richards, Assistant Attorney General, Office of the Attorney General

Nicholas Devereux, Office of U.S. Senator Mark Warner

Jonathan Selby, Office of the Secretary of Technology

Dr. Ali Eskandarain, The George Washington University

Public Members Present:

Listing attached

Minutes:

9:00: Welcome by Dr. Ali Eskandarain, Dean, College of Professional Studies & Dean, Virginia Science & Technology Campus, The George Washington University

9:08: Welcome by John Langford

Dr. Langford met recently with Senator Mark Warner and Representative Scott Rigell. The possibility of a future UMS Commission meeting at Mount Vernon was suggested.

9:10: Administrative actions, David Hinton

Review and approval of the draft minutes from the Inaugural Commission meeting of Sept 18, 2015. No corrections were offered. Motion to accept the minutes was made by John Langford and seconded. Approved by vote.

Review of proposed UMS Commission Work Groups and members. No suggestions or changes were offered. Motion to adopt this structure was made by John Langford and seconded by Tom Dingus and Guy Sanitate. Approved by vote.

Review and approval of a proposal (attached) for an Approval Committee to hold a public meeting in November to review the draft interim report due on November 30, make final edits, and approve for release. In addition to the two members that had volunteered for the committee, Mr. Jim Hughes also volunteered to bring the committee up to three members; Nicole Barranco, Robert Denhert, and Jim Hughes. A motion to adopt this proposal was made by Jim Hughes and seconded by Tom Dingus and Guy Sanitate. Approved by vote.

Review and approval of an Electronic Participation Policy (attached) to permit a limited number of occurrences of a member participating remotely due to specific circumstances. No suggestions for changes were offered. A motion to adopt the policy was made by Secretary Karen Jackson and seconded by Guy Sanitate. Approved and adopted by vote.

9:18: Innovation and Business Environment Briefing – Tom Dingus

Nissan and Volkswagen have opened TN facilities, we were not #1. We need to understand why.

Hubs of activity are developing in Virginia. These include maritime in Hampton Roads, automotive at the VTTI in the southwest, and UAS in various locations. Northern Virginia is the center of the universe for federal agencies and large enterprises that sell to government agencies.

Define a focal point for UMS marketing, economic/business development, and integration of resources.

We need to understand R&D tax credits and what would be the most beneficial.

We need to assess value of major events such as summits or expos for automated vehicles.

9:27: Education and Workforce Briefing – Tom Dingus

Our capabilities are not cohesive and not marketed. Dave Hinton is developing a data base.

At VTTI the private sector coming to us to understand the business, customers, psychology of the technology, and ethical considerations. The private sector is not coming to us only for technology.

We need to assess the needs of the companies here or that may come here. And create ideas for novel ways to bring educational institutions together.

10:42: Marketing Briefing – Guy Sanitate

We need to glean insights from large firms, the Northrup Grummans, BAEs, SAIC. Consider business mentorship programs. The fact we have the UAS test range here is huge, can draw in small firms.

June 2016: expect FAA UAS regulations.

Focus areas: Is beyond the platform to include software integration, sensors, training, R&D.

We can make an impact in training. What does certification or pilot training look like? Virginia could develop curricula for colleges to use.

Propose a COE. Tax incentives, Hold quarterly “Solve VA Problems” demo. General Atomics established a training academy in North Dakota. Have a Virginia booth at AUVSI.

This work group will develop talking points in work group breakout meetings to follow.

Comment by Karen Jackson: At a recent Viticulture meeting agriculture was interested in ground based UMS to look up. Let’s not bias the answer. We should hold a few sessions with the users.

Guy Sanitate: A COE constantly looks at all the options out there and figures out what is best for the Commonwealth.

John Langford Question: Why did the training go to North Dakota? Is one of the test centers. No reason why the academies cannot be established here. Maybe a better marketing push?

A comment was made: that is where customers already have a presence and fly large UAS at the Grand Forks Air Force Base.

Kim Young: the applications are where the puck is now. Not where it will go in the future. UAS is a 400 foot selfie stick today.

9:58 Policy and Regulatory Briefing – Vicki Cox

Randy Burdette (Virginia Department of Aviation) is on the registration task force for National Association of State Aviation Officials (NASAO).

A bill was recently introduced in New Jersey to mandate geo-fence requirements and criminalize use of non-compliant UAS. Immediate fixes before understanding the technology is a barrier.

10:13: A trade association model for the industry - Jeff Gallagher, CEO, Virginia Bio

Senator Mark Warner question: for context can you say why you came into existence?

Industry was forming and needed a voice and what define what it could become. Very similar situation as to what you have here.

We work as the domain expertise with VEDP.

The staff is about 3.5 people. We bring in people outside the membership for expertise needed; data analytics, health care providers, patient groups, out of state entities. The North Carolina bio center has helped, others have helped.

Culture change: The roster was held tight a few years ago. We changed all that. Now the data base is on the website and updated regularly. We have an attitude of forward motion. We have more freedom to experiment and fail.

UVA Darden School of Business: many alumni in health care space. Leveraged that, expanded access to capital by 10x.

10:28: Senator Mark Warner:

Thank you to everyone the Commission, and the work of Karen and Dave. Very impressive progress, kudos! This “is” the space. Glad contracts are let to assess where we are.

We need to continue to wrestle. Will a COE be an island? All UMS systems not just air. You need to decide that. My bias in setting up an organization for marketing: a trade association or a PPP gives it more flexibility. The winner is the one who can be fastest and most nimble.

Marketing plan: The Governor is all in on this. We are ready to get our marching plans from you.

We recently met with the FAA Earl Lawrence and “Hoot” Gibson. We will have a million sold over the holidays. Will be an immediate opportunity here. We celebrate having a test site but what does that mean? Need a “there-there” for the 6 states. I need help in putting that meeting together.

What is our specialty? The sooner the better. Beyond line of sight? You guys have to decide. Tell me – the sooner the better.

A function with the legislature is a good idea. All domains. Early in the session is good. This is budget season and I need to know asks.

One area – Intel community. What is intersection with DoD and Intel?

The Virginia Academy of Science, Engineering and Medicine (VASEM) meets later today. This is a connection with top scientists. We need to promote.

John Langford: consider telecommunications aspect.

Dave Architzel: Be careful to not focus too much on vehicles. Data opens up the aperture.

10:43 – Virginia Initiatives and Progress – Secretary Karen Jackson

We need to pick what we need to do. Looking to you for that. Not 12 options but pick where we are going and how to do it. One or 2 or 3 options.

Training – a lot of small academies are starting to evolve. An umbrella under which others come?

Cyber-security and UMS: Consider the intersection here.

We avoid unnecessary regulation.

What is the glue that draws all this together?

An Unmanned Systems Day for the legislators is a great idea, it may be too late to schedule for this session?

10:55: Mid-Atlantic Aviation Partnership (MAAP) - Rose Mooney, Executive Director

The MAAP has flown 40% of all test flights across the 6 ranges.

We have been awarded 3 NASA contracts: UAS Traffic Management (UTM), UAS in the NAS, and a 5-year IDIQ.

2015 growth at Blackstone, UAVPro/Textron due to MAAP involvement, including a \$1.4M construction activity.

Question: Can we consider reduced pilot qualifications, news gathering? Negating need for pilot license? Answer: Yes. We have suggested a training program that makes sense. The FAA is looking at it.

Question from John Langford: What areas do you think the MAAP should move to in the next years?

Answer: Beyond Line of Sight, larger aircraft, bring news coalitions together, and flying over people.

Question: Would a trade association be helpful or hindrance? Answer: UAS range was a competitive bid – a license to hunt for funds.

Question from John Langford: Is anyone working with the state police? Answer: We are working with Virginia Department of Emergency Management (VDEM) to get UAS off the ground – to know who to call.

Question: Speak to regional collaboration and how that works across the states? How has it gone? Should we think of single state vs. regional strategy? Answer: Three states is challenging. There is real strength in NJ with the FAA Technical Center, LoBiondo. We would want financial commitment signed up front in the future rather than negotiated later.

11:15: Public Comments

John Marshall: We have QTS and Verizon in backyards, DHS role beyond 100 miles, we need to get into video analytics in a big way.

John Marshall: Virginia can lead with Northrup Grumman, data fusion centers, Coast Guard, data analytics.

David King: last week Karen Jackson hosted a Viticulture event. Someone finally asked the end users what they wanted. Need to ask what you want, how you deploy it, if you can pay. Looks today like customer is VW, Amazon, DoD. We need this technology.

Peter Bale: The National Institute of Aerospace (NIA) has proposed and Economic Development Activity (EDA) grant. This brings together exactly some of the things we are talking about. Hampton Roads would be the focus with Wallops the focus for testing. We hope for a January announcement.

Joel Coulter: International; there is no talk here. The industry is already doing these flights around the world. We lost Amazon. Emphasize Beyond line of sight, big data, affordability. Innovation centers for local communities should be a priority.

John Brady, Raytheon: As DoD \$ decreases, go out and talk to companies about capability developed for Federal Gov that is ready to use in civil markets. Find new markets for these companies. Raytheon is getting into Precision AG, sensors and big data. Looking for alternative markets.

Rose Mooney: North Dakota has spent over \$30M in grants for small businesses to fly. It is hard to compete when they are handing out money to fly. Why did the training institute go to ND? Expect financial incentives and they were flying there already (Grand Forks is a UAS hub for USAF).

Ben Sherman, Germanna: focus on the future, getting the young people involved – be a technician, etc. Start in high school. Build UAS from scratch. Buzz Aldrin visited and kicked off our program and it was exciting for the students.

Donna Lawson: Funding for small businesses. NASA Langley Research Center spearheaded the EDA proposal that Peter Bale talked about. Would like Commonwealth to make it known we are a place of business for autonomy. Consider how to capture national market potential.

Jeff Reed, VA Growth Alliance: help us with the use of this flight area. We are home to DHS and Amazon's largest data center. How to put it all together? Any assistance that you can provide is appreciated.

11:30 Adjourn

Public Members Present	
Name	Organization
Warren Freda	Devons IOP
Patrick Harrison	Virginia DMV
Melissa Velazquez	Virginia DMV
Jeff Gallagher	Virginia Bio
Janette Kennedy	Micronics
Jonathan Lohman	Dominion Resources
Shawn Talmadge	OSPSHS

John A. Marshall	Gemini II Technologies
Elaine Wilde	Gemini Technologies
Jennifer Dionne	Atlantic Strategies Group
John Brady	Raytheon
Aimee Gilroy	Raytheon
Ben Sherman	Germanna Community College
Ed Dalrymple	Cedar Mountain Stone
Harry Gregori	Gregori Consulting
Julie Wheatley	Wallops Research Park
Cliff Burnette	Virginia Dept. of Aviation
David King	Albemarle County
Tim Tingler	QKE
Joel Coulter	Mobile Sciences Cons. LLC
Donna Lawson	NASA Langley
Denise Lawless	NASA Wallops
Rose Mooney	MAAP
Jeff Gallagher	Virginia Bio
Ann Ngo	U.S. Department of Commerce
John Simmons	The Roosevelt Group

Attachments:

1. Agenda
2. Work Groups and roster
3. Approval Committee Process
4. Electronic Participation Policy